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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,261	05/24/2001	Ikuya Arai	HIT 2 690-08	9568

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MATTINGLY, STANGER & MALUR, P.C.  
104 East Hume Avenue  
Alexandria, VA 22301

EXAMINER

NGUYEN, CHANH DUY

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 09/24/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application

09/863,261

Applicant(s)

ARAI ET AL

Examiner

Chanh Nguyen

Art Unit

2675

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Amendment***

1. The amendment filed on July 01, 2002 has been entered and considered by examiner.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 16 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDaniel et al (U.S. Patent No. 4,415,985; hereinafter briefly referred to as McDaniel) in view of Zenda (U.S. Patent No. 4,990,904).

As to claim 16, McDaniel discloses a display apparatus as recited in claim 16 with exception that McDaniel teaches changing the character size via the composite video input signal whereas the claim recites changing size of the video displayed image. For example, McDaniel discloses a display unit (e.g., CRT 64) for displaying an image signal based on video signal (character outputs appear on the video signal to CRT 178; see column 20, lines 47-49 and column 21, lines 47-50) received from a personal computer (e.g., central processor 52) which is connected to an input device (e.g., keyboard 66).

McDaniel teaches an interface circuit (60, 62) receiving from a personal computer (52) the video signal (see column 20, lines 47-49 and column 21, lines 47-50) and a control signal including control data (e.g., S0, S1, S2 or more particular an address latch enable signal, a data transmit/receive and a data enable signal) corresponding to a command inputted in the personal computer; see column 16, line 59 through column 17, line 4. McDaniel teaches a decoder (e.g., processor 90) for decoding the control data included in the control signal (e.g., S0, S1, S2 or more particular an address latch enable signal, a data transmit/receive and a data enable signal) to provide a digital signal; see column 16, lines 60-61. McDaniel teaches a signal generator circuit (CRT controller 158) for generating adjustment signal (i.e. signal GPA0 and GPA1) for a size of the displayed image according the digital signal (S0-S2) provided from the decoder (90); see column 5, line 64 through column 6, line 5 and column 22, line 31-34. McDaniel teaches that "the PROM module 60 further includes acknowledge logic 148 which generates an acknowledge signal which is sent to the processor 90 to acknowledge to the processor

90 that good data is present on the data bus 56"; see column 5, lines 29-38. This reads on the claim "said interface circuit upon receiving said control signal sends out an acknowledge signal indicating reception of said control signal to said personal computer".

Zenda teaches the use of keyboard input command to change the video displayed image size (e.g., from 720 X 350 dots to 640 X 350 dots) by switching the display modes stored in the memory; see Figure 2A-2D and column 2, lines 36-37, column 3, lines 1-14 and column 4, lines 28-40. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have substituted the RAM memory stored different display resolutions of Zenda to the RAM memory of McDaniel so that a user can change the video displayed image in different display modes as desired.

As to claim 20, this claim differs from claim 14 only in that the limitation "input device" is additionally recited. This limitation is clearly taught by McDaniel. For example, McDaniel teaches that "a particular program is selected by the operator via communications through the keyboard or some other similar device. In response to this selection, the system enters a conversational mode thereby informing the operator of the data required to execute the selected stored program"; see column 1, lines 41-46. Thus, the operator can request from a keyboard to execute or convert from single line mode to double line mode from the keyboard as taught by McDaniel. This reads on the claimed "inputted device" as recited in claim.

As to claim 19, McDaniel clearly teaches a memory (RAM 112) for storing the digital data.

As to claim 21, McDaniel teaches the input device including a keyboard (66).

4. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDaniel in view of Zenda, as applied to claim 16, and further in view of Bromberg et al (U.S. Patent No. 4,007,443; hereinafter briefly referred to as Bromberg).

As to claim 17, note the discussion of McDaniel, Zenda above, McDaniel and Zenda do not mention a start bit, a top bit and a control codes. Bromberg teaches a control codes as well as a start bit and a stop bit; see column 9, line 65 through column 10, line 20 through column 11, line 4. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have utilized the control code, start bit and stop bit as taught by Bromberg to the character display information of McDaniel as modified by Zenda so that the microprocessor knows the transfer rate of the bits and the number of information bits are expected to transmit.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDaniel in view of Zenda, further in view of Bromberg as applied to claims 16-17 above, and further in view of Naito (U.S. Patent No. 4,727,947).

As to claim 18, note the discussion of McDaniel, Zenda and Bromberg above, both do not mention a digital/analog converter. Using a digital/analog converter for converting a digital signal to an analog signal is well-known in the art. For example, Naito teaches the use of a digital/analog converter (26-28) for converting digital signal from decoder to analog signal; see figure 1C. Therefore, it would have been obvious to

one of ordinary skill in the art at the invention was made to have utilized the digital/analog converter as taught by Naito to the display controller as taught by McDaniel as modified by Zenda and Bromberg so that the digital signal can covert to analog signal.

***Response to Arguments***

6. Applicant's arguments with respect to claims 16-21 have been considered but are moot in view of the new ground(s) of rejection.

In view of amendment, the reference of Zenda has been added for new grounds of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

**Inquiries**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Steven Saras can be reached at 305-9720.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center only)**

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

C. Nguyen

September 17, 2002

  
CHANH NGUYEN  
PRIMARY EXAMINER